

a continuation of the evolution of the SMR industry in response to technological advances, ever-increasing demand, and the new regulatory and competitive structure mandated by the Budget Act.

Customer demand for SMR services continues to grow dramatically in the major urban and suburban areas of the country. Since 1990, the number of SMR units in service has grown by nearly 50 percent, to 1.5 million mobile users. Given the shortage of capacity on 800 MHz SMR systems in the urban areas of the Nation, the Commission's statutory responsibility is to promote the more efficient use of these radio frequencies in the public interest. Wide-area SMR licensees have made substantial commitments to develop more efficient technologies providing not only more capacity, but the type of services demanded by today's customers.

B. BUDGET ACT MANDATES

The Commission implemented the Budget Act's mobile services reclassification in its Second Report and Order in GN Docket No. 93-252 by classifying cellular, prospective PCS, wide-area SMR, interconnected traditional SMR and all paging services, among others, as CMRS services.<sup>32/</sup> As a result, existing SMR services have been reclassified from Private Mobile Radio Service ("PMRS")

---

<sup>32/</sup> See Second Report and Order, 9 FCC Rcd 1411 (1994) ("CMRS Order") at paras. 90, 102, and 119. As amended, Section 332 of the Act defines CMRS as "any mobile radio service (as defined in Section 3(n)) that is provided for profit and makes interconnected service available (A) to the public or (B) to such classes of eligible users as to be effectively available to a substantial portion of the public." All carriers meeting these criteria, according to the Budget Act, will be treated as common carriers and subject to similar regulation by the Commission.

to CMRS and will therefore become subject to common carrier regulation under Title II of the Act.<sup>33/</sup>

Section 6002(d)(3) of the Budget Act requires the Commission to amend its rules for reclassified former private carriers:

"as may be necessary and practical to assure that licensees in such service are subjected to technical requirements that are comparable to the technical requirements that apply to licensees that are providers of substantially similar common carrier services."<sup>34/</sup>

In the recent CMRS rule making, the Commission considered the fact that there is "significant variation" in its mobile services common carrier (Part 22) and SMR private carrier (Part 90)

---

<sup>33/</sup> The Budget Act provides a three-year transition period -- until August 10, 1996 -- during which existing reclassified SMR and paging providers will continue to be regulated as private carriers. See Section 6002(c)(2)(B) of the Budget Act.

<sup>34/</sup> The Conference Agreement adopted the House language concerning this transitional rule making with slight modifications to:

"clarify that the rules are intended to ensure that services that were formerly private land mobile services and become common carrier services as a result of this Act are subjected to technical requirements that are comparable to the technical requirements that apply to similar common carrier services." (p. 498).

The House Report required the Commission to review its private land mobile services rules and within one year issue such changes as may be necessary to achieve:

"regulatory parity for those persons providing equivalent services. It is the intent of the Committee that the Commission make a complete assessment of its rules affecting private land mobile, including loading requirements, spacing limitations, and others to determine whether such rules still serve the public interest in light of the changes made by this legislation." (p. 262)

regulations governing the amount of spectrum assigned to and the geographic area to be served by each licensee.<sup>35/</sup> It identified as a "key goal" whether the channel assignment rules should be revised so that reclassified Part 90 services are treated in a comparable manner to "substantially similar" common carrier services; specifically, whether the channel assignment rules for 800 MHz SMR should be revised to "facilitate licensing on a wide-area basis comparable to our licensing of cellular and broadband PCS spectrum."<sup>36/</sup>

On August 9, 1994, the Commission adopted its Third Report and Order in the CMRS rule making establishing CMRS technical, licensing and operational rules to create "regulatory symmetry and a competitive marketplace."<sup>37/</sup> Prior to determining the appropriate technical, operational and licensing rules to apply to these services, the Commission first had to determine which services were competitive and should therefore be similarly regulated. This, the Commission said, was necessary to create "an enduring regulatory regime under which substantially similar services are subject to symmetrical regulation. . . ." <sup>38/</sup>

---

<sup>35/</sup> Further Notice of Proposed Rule Making, GN Docket No. 93-252, 9 FCC Rcd 2863, 2870 (1994) (the "Further Notice"); See also Third Report and Order at para. 84.

<sup>36/</sup> Further Notice at 2870; see also Third Report and Order at paras. 84-85.

<sup>37/</sup> Third Report and Order at para. 78.

<sup>38/</sup> Id. at para. 69.

Relying on United States Supreme Court analysis of anti-trust issues, the Commission determined "the range of competitors in the CMRS marketplace . . ." by determining which telecommunications products and services are "reasonably interchangeable."39/ Although all of the CMRS services are not identical, the Commission said, they are "reasonably interchangeable" as long as they meet the customer's need to communicate on a real-time basis while on the move.40/ Simply because cellular and paging, for example, are not identical products, does not mean that those two services do not compete with one another.41/ Cellular and paging providers perceive themselves to be in competition with one another, and they market their services accordingly.

The dynamic technological nature of the CMRS market further promotes competition among services which are not identical.42/ Changes in technology have allowed parties to provide "substitutable" -- although not identical -- products to consumers. As an example of such competition among differing services, the Commission referred to "wide-area SMRs [as] a prime example of this phenomenon," noting that "today there is general agreement that wide-area SMR service is developing as a competitor to the cellular industry."43/ Thus, the Commission concluded that the market in

---

39/ Id. at paras. 51-52.

40/ Id. at para. 58.

41/ Id. at paras. 60-62.

42/ Id. at para. 69.

43/ Id. at para. 72.

which 800 MHz SMRs compete is much broader than simply SMR services; "800 MHz SMR licensees either compete or have the potential to compete" with other CMRS services.44/

In the Third Report and Order, the Commission also recognized that wide-area SMR systems have developed under a station-by-station licensing process that requires them to overcome many more regulatory obstacles than PCS and cellular providers in order to obtain the necessary authorizations to construct and operate their systems.45/ Due to the "patchwork nature of past licensing in the 800 MHz band . . . SMR licensees who have obtained wide-area authorizations will not necessarily be able to operate on a contiguous block of spectrum throughout a defined service area."46/ It concluded that to compete with cellular and broadband PCS services, wide-area SMR systems must be licensed on a wide-area basis similar to that applicable to cellular and PCS services; i.e., that its rules for the SMR service "should be, to the fullest extent possible, comparable to our rules governing competing commercial mobile radio service providers."47/

---

44/ Id. at para. 94. Even if it had concluded that the SMR market consists of nothing more than dispatch services, the Commission nonetheless would have found a significantly competitive market as there are some 14 million analog dispatch units in operation in the U.S. not including public safety. See F.C.C. Annual Report, Fiscal Year 1993, Private Radio Statistics, page 63.

45/ Id. at para. 96.

46/ Id.

47/ FNPRM at para. 2.

Accordingly, the Commission determined that wide-area licenses should be granted in the 800 MHz SMR band on an MTA basis, authorizing the licensee to construct stations anywhere within the MTA on any authorized channels that are available for construction.<sup>48/</sup> It further concluded that assigning contiguous spectrum, where feasible, will enhance the competitive potential of wide-area SMR providers -- in furtherance of the Budget Act's mandate.<sup>49/</sup>

The rules proposed herein are a "direct outgrowth" of the Commission's conclusions in the Third Report and Order and are intended to achieve Congress' mandate and the Commission's overriding goal of adopting regulations that "maximize competition among CMRS providers and eliminate regulatory distortions in the mobile services marketplace."<sup>50/</sup> With the modifications proposed herein, they will create the regulatory symmetry necessary for wide-area SMRs to effectively compete with cellular and PCS providers and will enhance opportunities for rural SMR operators.

#### **IV. A COMPREHENSIVE SMR LICENSING FRAMEWORK**

The Commission has recognized the public interest benefits and competitive alternatives wide-area SMR systems can offer, and has licensed wide-area SMRs on a site-by-site basis throughout most of the country. As a consequence, however, rural SMRs, some of which may have assumed that additional spectrum would always be available

---

<sup>48/</sup> Third Report and Order at para. 97.

<sup>49/</sup> Id. at para. 103.

<sup>50/</sup> FNPRM at para. 2.

on a site-by-site, channel-by-channel basis, now face spectrum shortages. Technological and marketplace forces have also changed the spectrum requirements of SMRs, and the Commission's licensing scheme must be revised.

Under the present channel assignment rules, wide-area SMR operators must "engineer around" incumbent high power systems resulting in more complex and costly frequency reuse plans reducing system capacity as compared to CMRS competitors with contiguous, exclusive-use spectrum. An existing SMR operator with five, ten or even 20 channels on a high power high site receives at least 55 miles and as much as 105 miles of co-channel protection -- thereby preventing the wide-area operator from using those frequencies anywhere within that radius of the local site. Not only are these high power operations unacceptably inefficient in congested areas,<sup>51/</sup> but even a handful of randomly channelized high power analog systems obstructs the accumulation of contiguous spectrum blocks by wide-area SMRs on an MTA, regional or nationwide basis and restricts them to the existing 25 kHz SMR channel plan.<sup>52/</sup>

---

<sup>51/</sup> Under Section 90.621(b) of the Commission's Rules, specified high elevation SMR sites in both northern and southern California receive up to 105 miles of co-channel protection to prevent interference. Given that California has the highest mobile communications demand in the Nation, this mountaintop "broadcast" SMR technology is an extremely inefficient, wasteful use of heavily congested spectrum. This is precisely the kind of frequency-congested area in which the Commission has a compelling public interest obligation to remove regulatory barriers to introducing advanced spectrum efficient technologies.

<sup>52/</sup> A wide-area SMR must maintain a "guardband" on each of its frequencies to preclude interference to adjacent channel, non-affiliated stations even though there may not be any adjacent  
(continued...)

Moreover, the existing SMR assignment scheme, with its mixture of wide-area and local SMR systems on the same spectrum bands, prevents wide-area SMRs from implementing the highly efficient, advanced digital broadband technologies being developed today that require contiguous channels and that will be used by cellular and PCS competitors.<sup>53/</sup> Under the existing SMR assignment rules, a five-channel trunked SMR system is licensed on five separate channels spaced 1 MHz apart. A single five-channel system licensed on the upper 200 SMR channels would have, for example, Channel 401, 441, 481, 521 and 561.<sup>54/</sup> Even a single incumbent five-channel local SMR system could prevent a wide-area SMR licensee from obtaining contiguous spectrum on an MTA basis on any of the

---

<sup>52/</sup>(...continued)  
channel station to be protected. The resultant emission mask for wide-area SMRs permits effective use of only 20 kHz of the 25 kHz SMR channel bandwidth. In contrast, PCS licensees with exclusive, contiguous spectrum have no comparable limitation on bandwidth except at each end of the PCS allocation blocks. If an MTA SMR block licensee had contiguous spectrum, out-of-band emission rules would be necessary only for the "outer channels" of the MTA license assignment.

<sup>53/</sup> The coexistence of high power analog stations and wide area systems within the same frequency block diminishes the efficient use of SMR spectrum in two ways. First, incumbent co-channel analog systems preclude the geometric increases in efficiency and capacity that result from contiguous channel allocations per sector per cell, and the increased trunking efficiency when larger bandwidths can be used. Second, a high power analog system using 5, 10, or 20 channels has less trunking efficiency and uses less efficient technology than the wide-area system. This further denies the public the most efficient use of the spectrum in the geographic area where low power and high power stations are interleaved.

<sup>54/</sup> As another example, a typical 20-channel SMR system could be licensed on the following four five-channel groups: 414, 420, 425, 440, 454, 460, 465, 480, 494, 500, 505, 520, 534, 540, 545, 560, 574, 580, 585 and 600.



proposed four 50-channel blocks or any variant thereof -- thereby foreclosing certain technologies, potentially limiting service offerings, and creating both regulatory and competitive disparity to the detriment of the public.<sup>55/</sup>

Cellular, PCS and wide-area SMRs will offer similar services to customers. Assuming that regulatory disparities are ameliorated, as intended by the Budget Act, the primary way that service providers will be able to differentiate their services will be through quality, cost-based pricing and coverage. The cellular and PCS carriers will have up to 40 MHz of contiguous, exclusive use spectrum. As a result, they can choose from among a variety of highly efficient digital access technologies that can achieve greater economies of scale through world-wide deployment including Code Division Multiple Access ("CDMA"), Global System for Mobile Communications ("GSM"), Wide-band CDMA ("W-CDMA") and others. The SMR industry does not have access to these technologies because it is impossible to assemble suitable spectrum blocks under the current SMR licensing rules. SMRs live with 25 kHz non-contiguous channels, while the cellular and PCS carriers are free to choose

---

<sup>55/</sup> A five-channel system has at least one channel in each of the four proposed 50-channel blocks, making it possible for a single five-channel high-power dispatch SMR operating in the urban core of an MTA to block the implementation of advanced, spectrally efficient broadband technologies throughout the MTA. For example, a five-channel high power analog SMR located on the Empire State Building can block the MTA licensee's ability to utilize contiguous spectrum on any one of the four proposed 50-channel blocks or the total 200 SMR channels in the New York MTA. Given these facts, an MTA licensee must have recourse to require the mandatory migration of some local systems to achieve a contiguous, exclusive use block for wide-area operations -- the value of an MTA SMR license is questionable without it.

any available technology (regardless of the required bandwidth) because of their allocation of contiguous spectrum.

The inescapable conclusion is that the current regulations on access to SMR spectrum dictate system design and operating compromises that place wide-area SMRs at a regulatorily-based cost and capacity disadvantage to CMRS competitors. As noted above, the "patchwork nature" of past 800 MHz licensing effectively prevents wide-area SMR systems from operating on contiguous spectrum in a defined service area.<sup>56/</sup> This is contrary to the intention of Congress in the Budget Act, which mandated both an overlay of common carrier regulation onto wide-area SMRs and regulatory symmetry for all CMRS providers.

This rule making provides the Commission with an unique opportunity to rationalize the 800 MHz SMR spectrum to achieve greater spectrum efficiency. Transitioning the upper 200 channels for wide-area, broadband SMRs is in the public interest as it offers wide-area licensees the contiguous spectrum needed for the advanced technologies required to compete with other broadband CMRS services. Transitioning local SMRs to the lower 800 MHz channels in congested areas and establishing new SMR blocks creates an opportunity to establish a more favorable RF environment for all SMRs. In addition, Industrial/Land Transportation eligibles operating in the upper 200 channels face the same kinds of difficulties as local SMRs and would benefit from operating in an allocation protected from future use by SMR operators and licensing

---

<sup>56/</sup> Third Report and Order at para. 96.

mills. The 50 channel Industrial/Land Transportation Pool should be limited on a prospective basis to such eligibles only.

Nextel does not advocate similar treatment for the 50 channels allocated to the Business Radio Service. Industrial/Land Transportation licensees are true private users, while most Business Radio licensees provide commercial service to third parties on a carrier basis. In the Third Report and Order, the Commission explicitly classified such systems as CMRS in recognition of their commercial, common carrier character.<sup>57/</sup> Moreover, business eligibles can be more efficiently served on advanced technology SMR systems than through piecemeal, limited capacity internal use private systems. Accordingly, the 50 Business channels should be designated for prospective exclusive SMR use and as part of the new SMR blocks.

Given all of these considerations, the land mobile radio 800 MHz allocation should contain four categories as summarized below and depicted on Chart IV:

- (1) the upper 200 channels for contiguous-block, broadband SMRs licensed through competitive bidding on an MTA basis;
- (2) the lower 80, Business 50, and General Category 150 channels for the SMR service;
- (3) the 50 Industrial/Land Transportation category channels primarily for these private systems and the retuning of category eligibles from the upper 200 channels;<sup>58/</sup>

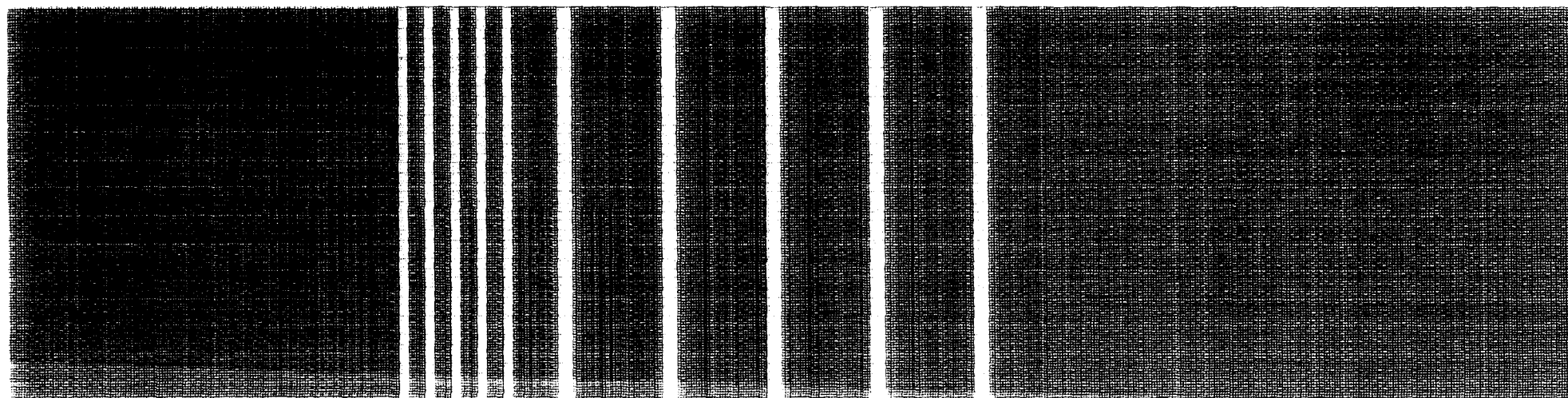
---

<sup>57/</sup> Id. at para. 67.

<sup>58/</sup> The Commission should eliminate future SMR eligibility for intercategory sharing of these channels and could require wide-area  
(continued...)

# PROPOSED 806-821/851-866 MHz CHANNEL ALLOCATION PLAN

1 150 400 600



SMRS



PUBLIC SAFETY



INDUSTRIAL/LAND TRANSPORTATION



BROADBAND SMR

25 kHz Channels

**CHART IV**

(4) the 70 800 MHz public safety channels exclusively for public safety eligibles as is currently the case; and

(5) in non-congested areas, as defined in Chart III and until January 1, 2000, the 150 General Category channels and 50 Business channels for exclusive SMR licensing (non-MTA licensees).

A. MANDATORY RETUNING OF INCUMBENTS FROM THE MTA LICENSE BLOCK IS STATUTORILY MANDATED AND REQUIRED BY THE PUBLIC INTEREST

1. Mandatory Retuning

The Commission has on many occasions exercised its authority to require incumbent licensees to relocate to accommodate more efficient technologies and services. The "radio spectrum is a public resource in which no user gains a vested right;"<sup>59/</sup> and the Commission has the authority to retune or relocate licensees when it is in the public interest. Where necessary to accommodate new innovative technologies, and to advance more efficient use of the spectrum, the Commission has previously taken just such action. For example, the spectrum on which SMRs and cellular operate today was initially made available to these services by reallocating the spectrum from television broadcasters and the U.S. government due

---

<sup>58/</sup>(...continued)

SMRs to retune off the Industrial/Land Transportation channels on a frequency exchange basis leaving them for these primarily private systems.

<sup>59/</sup> See In Re Table of Television Allotments, Notice of Proposed Rule Making, 83 FCC 2d 51, 110 (1980); see also In Re Applications of RKO General, Inc. (WNAC-TV), 78 FCC 2d 1, 48 (1980) ("... the radio spectrum is a scarce public resource.").

to a shortage of capacity for the rapidly growing land mobile services.<sup>60/</sup>

On the Private Land Mobile spectrum in the 450 MHz band, the Commission has mandated "channel splitting" to permit the introduction of more spectrally-efficient technology -- notwithstanding that it required incumbent licensees to surrender part of their assigned spectrum and at their own cost change out their equipment.<sup>61/</sup> This process is continuing in a pending Notice of Proposed Rule Making to "refarm" the private land spectrum between 72 MHz and 512 MHz by imposing spectrum efficiency standards based on narrowband technology.<sup>62/</sup> An existing licensee could, for example, see each of its channels split into

---

<sup>60/</sup> See First Report and Order, Docket No. 18262, 35 FR 8644 (June 4, 1970); Second Report and Order, 46 FCC 2d 752 (1974); Memorandum Opinion and Order, 51 FCC 2d 945 (1975).

<sup>61/</sup> See First Report and Order, 5 FCC 2d 779 (1966), in which the Commission split existing channels in the 450-470 MHz band (including Industrial/Land Transportation Category channels) to "provide for the fuller utilization of this frequency space." *Id.* at 780. The Commission found that technology was available which would provide equivalent quality and service range on 25 kHz channels as licensees had previously offered on 50 kHz channels, and therefore required existing licensees to change out their equipment to take advantage of this more spectrally efficient technology. In 1968, the Commission followed this precedent to split certain common carrier channels to "immediately alleviate channel congestion." See Report and Order, 11 FCC 2d 977, 978 (1968). See also First Report and Order, 13 FCC 2d 874 (1968), in which the Commission split channels in the Maritime Services. In all of these mandated channel splits, existing licensees were responsible for the costs of changing out their own equipment and any other operational accommodations.

<sup>62/</sup> Notice of Proposed Rule Making, 7 FCC Rcd 8105 (1992) (the "Refarming Proposal"). The standards would provide for greater efficiencies over time, moving from the current 25 kHz channel bandwidth to 6.25 kHz in most of the bands and to 5 kHz in the 72-76 MHz and 150-174 MHz bands.

three smaller channels, with new licenses being awarded on two of them. In other words, to permit the introduction of more spectrally-efficient technologies, the Commission proposes to take spectrum from existing licensees to be available for new licensees, thereby requiring the incumbents to obtain new equipment at their own expense that can operate on the smaller bandwidth.<sup>63/</sup>

Most recently, the Commission determined that relocating microwave users from the 2 GHz spectrum band was in the public interest because that spectrum was needed for the provision of emerging technologies, including PCS.<sup>64/</sup> Ensuring the provision of PCS would "further the Commission's mandate to encourage . . . the larger and more effective use of radio in the public interest."<sup>65/</sup> Because there was a "pressing need" for PCS spectrum,<sup>66/</sup> and because the 2 GHz band met the needs of this emerging technology, the Commission determined that it was in the public interest to relocate the existing 2 GHz users<sup>67/</sup>

---

<sup>63/</sup> This is far more disruptive than "retuning," as discussed herein, which in most cases will require no more than an adjustment to existing equipment to operate on different channels of the same bandwidth.

<sup>64/</sup> First Report and Order/Third Notice of Proposed Rule Making, ET Docket No. 92-9, 7 FCC Rcd 6886 (1992), at paras. 4 and 14.

<sup>65/</sup> Notice of Proposed Rule Making, ET Docket No. 92-9, 7 FCC Rcd 1542, 1543 (1992), citing 47 U.S.C. Sections 157 and 309(g).

<sup>66/</sup> First Report and Order, *supra*. n. 64, at para. 9.

<sup>67/</sup> In allocating spectrum for PCS, the Commission stated:

"Allocation decisions are among the most difficult that the Commission must make because virtually all of the  
(continued...)"

-- even though their relocation was to spectrum with less advantageous propagation characteristics requiring re-engineering, relocation and reconstruction of such systems.68/

Notwithstanding this recent precedent, the Commission proposes that instead of mandating the relocation of 800 MHz SMR incumbents, decisions regarding relocation (i.e., spectrum efficiency and the ability to introduce new technology) should be left to the parties and the marketplace.69/ It states that it would prefer to allow MTA licensees and incumbents to "negotiate relocation, frequency swaps, mergers, purchases or other arrangements on a voluntary basis."70/ It asks, however, whether the Commission should intervene when incumbents refuse "reasonable" inducements to relocate.71/

---

67/(...continued)

"Allocation decisions are among the most difficult that the Commission must make because virtually all of the usable spectrum already is allocated to specific services, and most of it has been assigned to specific licensees. Therefore, to provide for new services, the Commission must identify spectrum that can be shared between a new service and an existing service, or that can be reallocated to a new service and the incumbent licensees relocated." (emphasis added) See Notice of Proposed Rule Making and Tentative Decision, Gen. Docket No. 90-314, 7 FCC Rcd 5676 (1992) at para. 31.

68/ Relocating 2 GHz microwave users is a monumental task compared to retuning incumbent SMR providers. Relocating a microwave licensee to a completely different frequency band requires changing out most of its equipment, relocating some sites and establishing additional sites in many cases.

69/ FNPRM at para. 35.

70/ Id.

71/ Id.



Nextel agrees that all of these approaches will likely be utilized by MTA licensees to facilitate clearing the MTA block to obtain exclusive-use contiguous spectrum. Nextel submits that in addition, mandatory retuning will be necessary. Given the fact that there are already 33,000 SMR licenses -- and will be many more when the 40,000 application licensing backlog is processed -- no amount of voluntary negotiation alone will result in contiguous spectrum for the MTA licensee.

The Commission tentatively concludes that the MTA licensee obtains no authority to clear its spectrum block by retuning incumbents.<sup>72/</sup> Rather, according to the Commission, the MTA licensee has merely purchased the right to negotiate with incumbent providers to either purchase their systems or reach a voluntary retuning agreement.<sup>73/</sup> This would mean that the MTA licensee is purchasing the right to negotiate with another entity -- a right that everyone has today and one that Nextel and others have used for several years in establishing their present spectrum positions. This "right," however, is one which will not lead to the establishment of contiguous MTA licensee spectrum.

Voluntary measures are in effect today and have been for many years. They provide no assurance that an MTA licensee can clear all or even part of the 200-channel block for wide-area operations using contiguous spectrum. The very question of whether the Commission should intervene where "reasonable" relocation

---

<sup>72/</sup> Id. at para. 34.

<sup>73/</sup> Id. at para. 35.

inducements fail indicates its awareness that voluntary measures alone cannot be relied upon in a competitive environment. The Commission cannot shift its "sworn duty" to promote the introduction of spectrally efficient technologies to the marketplace. Purely voluntary retuning will only encourage "greenmail" and engender delay in achieving licensing symmetry, thereby further reducing the competitiveness of wide-area SMRs relative to cellular and PCS in contravention of statutory mandate. Protecting inefficient, high-power broadcast-type SMR systems in spectrum congested areas disservices the public interest.

## 2. Congested Area Licensing Plan

Given these considerations, Nextel submits the following comprehensive plan building on the Commission's proposals and extensive discussions with SMR and other licensees in the 800 MHz band and their representatives.<sup>74/</sup> Nextel supports licensing the upper 200 channels in one 200-channel block on an MTA basis, as discussed below. In congested areas, there would be a one-year period commencing upon the issuance of each MTA license to complete the migration of local SMRs from the MTA block.<sup>75/</sup>

During the first six months, the MTA licensee could negotiate frequency swaps, mergers, purchases or suitable operating arrangements with incumbent local systems to migrate to other

---

<sup>74/</sup> Nextel has met over the past two months with all segments of the SMR industry including several dozen local SMR licensees, several wide-area licensees, AMTA, ITA and SMR Won.

<sup>75/</sup> In congested areas, wide-area SMRs would have access to all SMR channels to provide more efficient technologies.

channels. Nextel proposes that incumbents voluntarily agreeing to migration within the first six months receive a number of important benefits offering real incentives to legitimate local operators who seek to continue their existing services or to grow them in response to increasing demand. These would include:

- (a) the migrated or retuned SMR licensee would receive a Commission-mandated prospective 70-mile area of protection within which there can be no further short spacing. This additional protection would run with the retune's new license, i.e., it would be freely transferable;

- (b) the retuned SMR could not be subsequently involuntarily retuned; and

- (c) the tax certificate program used in several of the Commission's competitive bidding rules should be extended to retuned SMR operators who sell their licenses and reinvest the proceeds in other aspects of the industry.<sup>76/</sup>

During the final six months of the one year migration period, incumbents would be subject to required retuning. In either case, no incumbent would have to migrate unless and until an MTA licensee makes comparable alternative frequencies available in the lower 80 SMR, 50 Business, or 150 General Category channel blocks.<sup>77/</sup> If the MTA licensee cannot find substitute channels available at the

---

<sup>76/</sup> In the PCS proceeding on relocating incumbent microwave licensees, the Commission permitted the use of tax certificates as an incentive for voluntary agreements to relocate. See Third Report and Order and Memorandum Opinion and Order, ET Docket No. 92-9, 8 FCC Rcd 6589, 6606 (1993).

<sup>77/</sup> As noted previously, a private licensee eligible in the Industrial/Land Transportation Pool could be retuned to those channels dependent upon frequency availability. The limited number of public safety licensees in the 200 MTA block channels would not be subject to mandatory retuning.

incumbent's existing transmitter location(s) within the MTA, or acceptable alternative sites, on a one-for-one basis for every frequency, the incumbent would not be required to migrate.<sup>78/</sup> Pending completion of this migration period, no additional licenses could be granted on the 80 SMR, 50 Business, or 150 General Category channels, excepting operational changes for existing licensees as discussed in note 84, *infra*.

All out-of-pocket costs associated with retuning would be borne by the MTA licensee; *i.e.*, the MTA licensee must pay for the retuning or undertake the retuning process for the incumbent.<sup>79/</sup> This would include all of the costs covered in the Commission's Emerging Technologies transition plan for relocating 2 GHz microwave licensees to clear that spectrum for PCS services, including, for example, furnishing comparable substitute mobile units to the incumbent's subscribers if their existing equipment cannot operate on the substitute channels.<sup>80/</sup> If the incumbent

---

<sup>78/</sup> In the event an incumbent licensee is not or cannot be retuned, it should be permitted flexibility to move a base station (or to reconfigure an existing high power station to multiple low power facilities) so long as the station's 40 dBu contour at the new location(s) does not exceed its original 40 dBu contour. This ensures that the incumbent's protected 40 dBu contour and its interfering 22 dBu contour will not be extended to infringe on other incumbent or MTA licensee rights. This is consistent with the FNPRM's proposal to allow incumbents limited flexibility, but not any expansion, of their existing service areas within the MTA on the upper 200 channels.

<sup>79/</sup> All retuning must take place in accordance with a schedule reasonably established by the retunee to avoid any disruptions in service.

<sup>80/</sup> See First Report and Order, ET Docket No. 92-9, *supra.*, at 6890, for a discussion of the PCS licensee's responsibilities to  
(continued...)

licensee requests that the MTA licensee perform the retuning, they would be responsible for negotiating mutually acceptable arrangements. In short, the MTA licensee would have to take the steps necessary to keep the migrated system on the air with the absolute minimum disruption possible.

Consistent with paragraph 25 of the FNPRM, licensees on the SMR block channels would be free to implement digital technologies, to aggregate channels or to integrate local systems to provide service over a larger area. SMRs moving to these frequencies would have the flexibility to continue and grow their operations in a more suitable environment without sacrificing the ability to later consolidate spectrum and implement advanced technology systems. Additionally, this plan would eliminate any future requirement for coordination of the Business and General Category channels.

### 3. Non-Congested Areas Licensing Plan

In non-congested areas, the relatively lower demand for SMR services makes possible additional spectrum use options. As noted above, Nextel proposes that the Commission establish new SMR spectrum blocks consisting of the current 150 contiguous General Category channels and 50 Business Category channels.

Upon creation of the new SMR blocks, and the completion of MTA SMR block auctions, the MTA licensees could initiate retuning of

---

80/(...continued)  
the relocated microwave incumbent; see also Third Report and Order, ET Docket No. 92-9, *supra.*, at 6603-04, wherein the Commission concludes that "comparable facilities" will be determined by looking at "system reliability, capability, speed, bandwidth, throughput, overall efficiency, bands authorized for such service, and interference protection."

non-urban, incumbent SMRs in non-congested areas from the upper 200-channel MTA block to the SMR blocks. Retuning would be accomplished on a six-month voluntary and six-month mandatory basis identical to that for congested areas; i.e., voluntary retunees would receive the inducements discussed above, no retuning would occur unless the MTA licensee makes comparable channels available.

All existing licensees on channels in the new SMR blocks would have the one-year retuning period to construct and place their systems in operation; any unconstructed authorizations would be recovered by the Commission. In addition, upon the conclusion of retuning, the MTA licensee would surrender any remaining authorizations it holds for the new SMR block channels; i.e., the MTA licensee would be limited to 280 channels in the non-congested area of the MTA for a five-year period regardless of any outstanding extended implementation authorizations.

All new SMR block channels recovered from the MTA licensee would be assigned to the local retuned incumbents in the MTA on a *pro rata* basis to the number of frequencies they have had retuned. This preserves maximum flexibility for the growth of existing systems. Further, Nextel submits that existing licensees should have a preference for licensing on any other recovered channels over applicants for new systems. This is consistent with the Commission's long-standing policy of giving existing SMRs a preference for recovered 800 MHz SMR channels.<sup>81/</sup>

---

<sup>81/</sup> Section 90.611(d) of the Commission's Rules establishes waiting lists for recovered 800 MHz channels when no channels are  
(continued...)

This plan gives rural SMRs a block of 150 contiguous channels and 50 additional channels in which no licensees can warehouse spectrum.<sup>82/</sup> By requiring the MTA licensees to exit the new SMR blocks in non-congested areas, it assures a largely high power-to-high power environment. It also eliminates the incidence of local SMRs being surrounded by multiple channel unconstructed systems with extended implementation. It will also recover channels from speculators and reduce incentives toward future speculation. Finally, by limiting the exclusion of wide-area licensees from the new SMR block channels to five years, it preserves the opportunity for these licensees in the future to sell their holdings in response to marketplace forces.

MTA licensees would be limited to the 280 current SMR category channels only in the non-congested area of each MTA. They would have the right to clear the upper 200 channels to obtain contiguous spectrum throughout each MTA and would retain any channels remaining after retuning in the MTA block in congested areas.

In order to effectuate these changes, and to facilitate the migration and retuning of local SMRs from the wide-area SMR spectrum block, the Commission should continue its licensing freeze

---

<sup>81/</sup>(...continued)  
available at an applicant's proposed station coordinates. Applicants seeking channels to expand existing systems receive priority over applicants for new stations.

<sup>82/</sup> SMR block licensees would be free to band together or otherwise aggregate stations to provide service over wide areas or to implement more efficient technologies.

on the lower 80 SMR channels,<sup>83/</sup> and stop licensing on the 50 Business channels and 150 General Category channels until the end of the proposed retuning period.<sup>84/</sup> Application freezes are generally undesirable, however, in this instance, the public interest supports preserving the existing landscape in order to realize the benefits of a more rational SMR licensing process. Additionally, this would alleviate unnecessary administrative burdens for the Commission.

#### 4. Retuning is Feasible

Nextel has conducted a detailed evaluation of the existing SMR licenses in the Chicago MTA and the Denver MTA to demonstrate the feasibility of retuning incumbent licensees from the upper 200 SMR channels to the remaining 80 SMR channels, 50 Business channels, and the 150 General Category channels. This evaluation included the steps necessary to establish a contiguous block if, hypothetically, Nextel were to win the 200-channel block in either the Chicago MTA or Denver MTA auctions. The guidelines used in this retuning exercise are set forth in Attachment A.

Within the top 200 channels, there are 65 non-Nextel incumbent stations within 100 miles of the core of Chicago; 49 of them can be

---

<sup>83/</sup> See Third Report and Order at para. 108.

<sup>84/</sup> On a waiver basis, applicants could apply for new station sites necessitated due to operational contingencies; e.g., expiration of leases for a base station or tower site, loss of a tower due to natural disaster or other unforeseeable circumstances. In addition, non-retunable incumbents (both local and wide-area) on the MTA block, or incumbent licensees on the lower 800 MHz channels, should be permitted to file applications to modify their systems within their existing 40 dBu contours, as discussed further in n. 78, *supra*.



successfully retuned to Nextel frequencies outside of the contiguous block.<sup>85/</sup> As to Denver, there are 26 non-Nextel incumbent stations within 100 miles of the city core. All of them can be retuned to Nextel frequencies.

This exercise demonstrates that retuning of the MTA block to obtain contiguous, exclusive spectrum is feasible. In Denver, all incumbents can be retuned. In Chicago, mandatory retuning alone would not be sufficient; as discussed above, the MTA licensee would employ a combination of approaches, including voluntary channel swaps, operating agreements, channel purchases and mergers -- to clear the MTA block.<sup>86/</sup> Nextel's experience in negotiating the purchase of hundreds of SMR systems over the past seven years convinces it that Commission-mandated retuning of incumbents is indispensable to an MTA licensee's success in obtaining contiguous, exclusive spectrum.

Without mandatory retuning, the cellular and PCS industries will retain regulatory superiority and "regulatory asymmetry" as against competing CMRS services contrary to the express Congressional directive set forth in the Budget Act. At the same time, this approach, in combination with the licensing changes

---

<sup>85/</sup> The Nextel frequency pool consists of channels licensed to or managed by one of Nextel's subsidiaries, channels licensed to or managed by Motorola or one of its subsidiaries, and channels licensed to or managed by OneComm or its subsidiaries. Nextel has entered into definitive agreements to acquire the SMR systems licensed to or managed by Motorola and OneComm. Applications to effectuate these transactions are pending before the Commission.

<sup>86/</sup> Nextel looks favorably on alliances and operating agreements with other SMRs to facilitate its goal of creating a nationwide, seamless wide-area SMR network.